(an impossible task anyway) for in the end it does enrich our already altered flora. Let's keep pitcher plants, but let's keep them under control and resist the temptation to transplant them elsewhere. The risks to the last vestiges of an Irish wilderness are far too great.

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REVIEW OF RECENT LITERATURE

Bird, D.F., Kalff, J. Bacterial Grazing by planktonic lake algae. Science 231: 493-495 1986.

This report describes 6 carnivorous algae that consume large quantities of bacteria in several Canadian lakes. The algae belong to the genera: *Dinobryon* and *Uroglena* with the former genus ingesting almost 30% of its weight in bacteria per day. This grazing rate is of the same magnitude as marine microflagellates that lack photosynthetic pigments and are totally dependent on external carbon sources. In fact, *Dinobryon* was more efficient than crustaceans, rotifers and ciliate communities combined in removing bacteria from these lakes. Electron micrographs showed bacterial cells inside food vacuoles.

Bopp, M. and E. Weiler, 1985. Leaf blade movement of *Drosera* and auxin distribution. Naturwissenschaften *72:*434.

The speed and intensity of leaf folding after prey stimulus or application of $NH^4H^2PO^4$ is enhanced by application of external auxin treatment. Experiments cited here confirm that external and endogenous auxin produces folding by moving from the leaf tip to the area of prey where growth is stimulated in cells on the underside of the leaf. DES

Farkas, MJ and RA Brust, 1985. The effect of a larval diet supplement on the development in the mosquito *Wyeomyia smithii* (Coq.) under field conditions. Can. J. Zool. *63:*2110-2113.

This study was conducted within the water-filled leaves of *Sarracenia purpurea* L. A commercial fish food was selected as the diet supplement and standardized numbers of mosquito larvae and fluid were replaced in pitchers. The supplement significantly accelerated larval development with larger, more fecund adults. DES

Joel, DM, et. al., 1985. Ultraviolet patterns in the traps of carnivorous plants. New Phytol. *101:*585-593.

A survey of the UV patterns of a wide diversity of CP traps showed conspicuous UV patterns somewhat similar to many flowers. The patterns are based on leaf tissue, nectar and fluid pools. The results are discussed with respect to the possibility that UV patterns may attract prey to *some* CP.

Joel, Daniel, M., 1985. Leaf anatomy of *Caltha dioneaefolia* Hooker (Ranunculaceae)—Is this species carnivorous? Bot. J. Linn. Soc. *90:*243-252 (15 fig.).

The leaf of this species is composed of two lobes somewhat resembling *Dionaea* but no glandular structures or trigger hairs were noted and it was concluded that the species is non-carnivorous. DES

Johnson, CW, 1985. Bogs of the northeast. University Press of New England (Hanover, NH 03755, $12.95 paper), 269 p., illustr.

This is a fine book that should be in the hands of serious CP enthusiasts who have an interest in field ecology as well as culture. The book is written at the layman level but contains a wealth of information on bogs (or peatlands, as the author correctly prefers) of the Northeastern United States, and also can be applied to bogs of the Midwest and Eastern Canada. There is a good discussion of bog classification and nomenclature with illustrations and diagrams. This is followed by chapters on the ecology, plants and animals of the bogs, including a short chapter on CP. There are many black and white, and color photos. There is a good bibliography, and the book concludes with a list of monitored and protected bogs which the reader may visit in the Northeast. Of considerable interest is the quality of writing and approach—the author imparts his sense of wonder and mystery about bogs and being in them. DES

Kondo, K., Three new species of *Drosera* from Australia. Bol. Soc. Broteriana 57(2): 51-60 1984.

Three species of *Drosera* belonging to the *D. petiolaris* family were described. They are *D. dilatato-petiolaris, D. falconeri* and *D. lanata.*

Simola, L.K., Koskimies-Soininen, K. & Tomell, M. Glycolipids of turions and leaves of *Utricularia* vulgaris at different stages of development. Physiol Plant 65(1): 23-26 1985.

After the turions of *U. vulgaris* were germinated in long-day conditions, the glycolipid composition was compared with resting turions. No great changes were found in glycolipid classes during sprouting but there were differences noted in fatty acid proportions.

Mutant Flies-A Feast for One's Carnivores

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The common fruit fly, *Drosophila melanogaster,* serves as an excellent source of nutrition for carnivorous plants. Through studying *Drosophila,* scientists have proposed models for the genetic mode of inheritance in higher organisms. Fruit flies can also serve as a constant supply of live food for CP. *Drosophila* are easily cultured, readily available, and require minimal space, mess, and expense.

D. melanogaster unlike the common housefly, *Musca domestica,* is only several millimeters in length and free of disease-carrying microorganisms. Thus hundreds of flies can be grown in a small culture vessel.

A starter culture is purchased from Carolina Biological Supply Company. The minimal materials required are a vial of flies, culture vessels, and a nutrient medium. Carolina Biological has developed an ultimate patented formula that requires no sterilization of the medium. Equal volumes of Instant Drosophila Medium R and distilled water are added to the culture vessel, along with a few grains of dried Brewers yeast. A harmless blue dye is added to the medium to aid in visualization of the larvae. The medium congeals within a minute, flies are introduced, and the vial is plugged. Plastic polyurethane foam or non-absorbent cotton make sufficient plugs. Plastic inserts are also added to the culture vessel to increase surface area.

Drosophila cultures should be kept at an optimum temperature of 20-25°C, (68-77° F). The generation time is approximately two weeks. It is generally recommended that cultures be grown at the lower limit of this